

Amendment under 37 C.F.R. § 1.116  
U.S. Application No. 10/618,653

Attorney Docket No. Q76188

**REMARKS**

Claims 1-11 are all the claims pending in the application. Claims 1, 6 and 11 have been amended herein.

The Examiner continues to reject claims 1 and 6-11 for the reasons presented in the Final Office Action. Specifically, the Examiner rejects claims 1 and 6-11 under § 102(b) as being anticipated by Galloway et al. (U.S. Patent No. 4,689,597), Douglass, et al. (U.S. Patent No. 6,157,287) and Endo, et al. (U.S. Patent No. 6,556,121).

In addition the Examiner has entered a new grounds of rejection under § 103 based on Williamson, et al. (U.S. Patent No. 4,056,884) in view of either Electronic Industry Alliance Standard (EIA) RS-296-D or Genesis Manufacturing, Inc. MEID-0001 (GENESIS).

As a preliminary matter, although the Examiner states that the EIA publication was published in 1978, Applicants do not see any publication date. Therefore, the Examiner is respectfully requested to provide confirmation that this document is in fact prior art.

With respect to the rejection based on Galloway, et al., the Examiner merely states that the claims do not contain the limitation of the fuses being physically separated from one another. Thus, the Examiner contends that the claims are broader than that which is argued. However, the Examiner has failed to specifically address the arguments raised in Applicants' response, namely that Galloway, et al. does not disclose or suggest the claimed invention wherein each of the fuse elements of the claimed invention includes a separate individual housing and that the fuse elements are coupled to one another by the coupling part. In contrast, the fuse elements disclosed in Galloway, et al. include a common housing 12. As a result, Applicants argued that the fuses in the claimed invention can be separated from one another which is the advantage of

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the present invention. This is an advantage that is derived from the claimed invention and need not be positively claimed. Nonetheless, the elements of the claimed invention which distinguish over Galloway, et al. provide this important advantage.

Further, in amended claim 1, it is recited: "a coupling part on which respective ends of said flat terminal pieces of said fuse elements are unitarily formed so as to be aligned along said coupling part". According to amended claim 1, the respective ends of the flat terminal pieces of the fuse elements are unitarily formed on the coupling part from a single plate material. On the other hand, Galloway, et al. discloses that the fuse elements are coupled by the housing 12. Accordingly, it is submitted that claim 1 patentably distinguishes over Galloway, et al.

With respect to the rejection based on Douglass, et al., the Examiner merely takes the position that the term "unitary" is broader than the previous term "integral". Initially, Applicants respectfully disagree with the Examiner. As previously argued, the DIN rail 14 disclosed in Douglass, et al. is not analogous to the claimed coupling part of the present invention. Clearly, Douglass, et al. does not disclose an arrangement in which the coupling part is unitarily coupled to the flat terminal piece (in a one-piece arrangement). Claim 1 has been amended to recite that the "coupling part and said flat terminal pieces are unitarily formed from a single plate material". On the other hand, in the Douglass, the DIN rail 14 and the blade terminals 38 are not unitarily formed from a single plate material. Accordingly, Applicants submit that the claims as pending patentably distinguishing over Douglass, et al..

With respect to the rejection based on Endo, et al., Applicants submit that in Endo, et al., when the housings are mounted on the fuse elements, the fuse elements are separate from the belt-like material 50. In contrast, according to the invention, the fuse elements with the housings

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attached are interconnected by the coupling part, which is simply not taught or suggested by Endo et. al. Further, according to (amended) claim 1, each of the fuse elements includes the insulating housing and the fuse elements are unitarily formed on the coupling part. On the other hand, Endo et al. discloses that a belt-shaped material 50 is subjected to a press working to make a connected body 51, in which the fuse element 5 and a pair of the terminals 2 are obtained by separation (Column 6, line 57-62). Therefore, in the Endo, each of the fuse elements 5 does not have the housing 4 in the belt-shaped state.

Finally, turning to the § 103 rejection, assuming the secondary references are prior art to the application, these references merely disclose using tape to package electronic components together. See, Figure 10.2 on page 25 of Genesis and the left-hand figure of EIA-296-D. Based on these teachings, the Examiner contends that it would have been obvious to a person of ordinary skill in the art at the time the invention was made to package the fuses of Williamson by coupling the terminal pieces of the fuses to the tape so as to form a fuse belt having a plurality of fuses coupled to the coupling part (the tape). Claims 1 and 6 require that the fuse elements be *unitarily* coupled to the coupling part in a one-piece arrangement. In contrast, even if one were to modify the Williamson terminal pieces in the manner suggested by the Examiner, one would arrive at an arrangement in which the fuse elements are simply taped to the tape by adhesive -- it would not be a unitary arrangement. Accordingly, the rejection is improper.

Claim 6 has been amended to recite "a plurality of fuses and a coupling part that is unitary to the fuses, wherein each of said fuses includes a pair of terminal pieces, a fusible part connecting said pair of terminal pieces and an insulating housing covering the fusible part". According to amended claim 6, the coupling part is unitary to the fuses and each of the fuse

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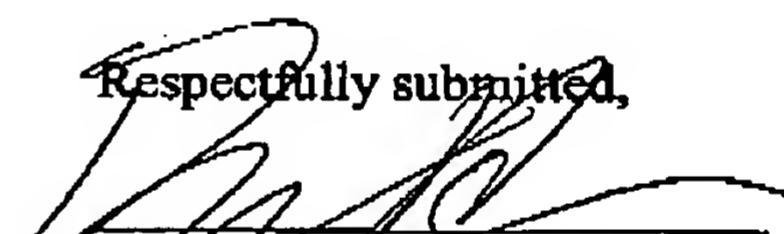
elements 5 does not have the housing 4 in the belt-shaped state as disposed above. Thus, claim 6 is patentable for the reasons discussed above.

Furthermore, Applicants have added the limitation "physically separated" to claim 11 to address the Examiner's comment.

**Please note that Applicants formally request an interview with the Examiner in the event the Examiner does not find the case in condition for allowance. The Examiner is kindly requested to contact the undersigned at the telephone number listed below.**

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

  
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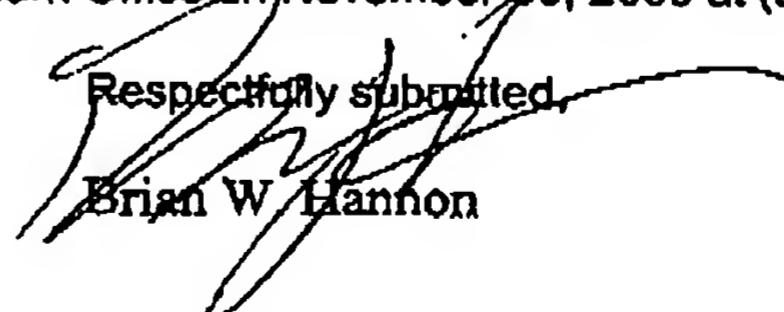
Date: November 30, 2005

**CERTIFICATION OF FACSIMILE TRANSMISSION**

Sir:

I hereby certify that the above identified correspondence is being facsimile transmitted to Examiner Anatoly Vortman at the Patent and Trademark Office on November 30, 2005 at (571) 273-8300.

Respectfully submitted,

  
Brian W. Hannon